

What is claimed is :

1. A batch testing system for wireless communication devices comprising:
 - a signal generator for generating a first testing signal;
 - 5 a transceiving unit, deployed in a shielded anechoic chamber and coupled to the signal generator, for transmitting the first testing signal;
 - a plurality of wireless communication devices under test (DUTs) in the shielded anechoic chamber for receiving the first testing signal from the transceiving unit and transmitting a plurality of second testing signals to the transceiving unit; and
 - 10 a signal monitoring device, coupled to the transceiving unit, for monitoring the second testing signals received by the transceiving unit.
2. The batch testing system of claim 1, further comprising:
 - 15 a control unit, coupled to the signal generator, the signal monitoring device and the DUTs, for controlling the generation of the first testing signal and the monitoring and transmitting of the second testing signals.
3. The batch testing system of claim 2, further comprising:
 - 20 a multiplexer, coupled to the control unit, the signal monitoring device and the DUTs, for switching between the signal generator and the signal monitoring unit.
4. The batch testing system of claim 3, wherein the signal generator comprises a plurality of signal-generating units, and the multiplexer switches between the signal-generating units.
- 25 5. The batch testing system of claim 3, wherein the signal monitoring device comprises a plurality of signal-monitoring units, and the multiplexer switches between the signal-monitoring units.
6. The batch testing system of claim 1, further comprising:

a batch container for loading the wireless communication devices.

7. The batch testing system of claim 6, wherein the batch container is a rectangular container.
8. The batch testing system of claim 6, wherein the batch container is a circular container.
9. The batch testing system of claim 6, wherein the batch container is set into the shielded anechoic chamber by a window-type loading mechanism.
10. The batch testing system of claim 6, wherein the batch container is set into the shielded anechoic chamber by a drawer-type loading mechanism.
11. The batch testing system of claim 1, wherein the shielded anechoic chamber is pyramidal.
12. The batch testing system of claim 1, wherein the shielded anechoic chamber is cubical.
13. The batch testing system of claim 1, wherein the transceiving unit is an antenna or antenna array.
14. The batch testing system of claim 1, wherein the DUTs are deployed in a quiet zone of the shielded anechoic chamber.
15. The batch testing system of claim 1, wherein the signal generator is a vector signal generator.
16. The batch testing system of claim 1, wherein the signal generator is a Golden Sample of the DUTs.
17. The batch testing system of claim 1, wherein the signal monitoring device comprises a vector signal analyzer and a power meter.
18. The batch testing system of claim 1, wherein the signal monitoring device comprises a spectrum analyzer.
19. The batch testing system of claim 1, wherein the signal monitoring device is a Golden Sample of the DUTs.

20. A batch testing method for wireless communication devices comprising steps of:

setting a plurality of wireless communication devices under test (DUTs) in a shielded anechoic chamber;

5 generating a first testing signal;

transmitting the first testing signal by a transceiving unit;

receiving the first testing signal by the DUTs;

analyzing the received first testing signal;

transmitting a plurality of second testing signals by the DUTs;

10 receiving the second testing signals by the transceiving unit; and

monitoring the received second testing signals.

21. The batch testing method of claim 20, wherein the shielded anechoic chamber is pyramidal.

22. The batch testing method of claim 20, wherein the DUTs are deployed in
15 a quiet zone of the shielded anechoic chamber.

23. The batch testing method of claim 20, wherein the first testing signal is generated by a Golden Sample of the DUTs.

24. The batch testing method of claim 20, wherein the first testing signal is generated by a vector signal generator.

20 25. The batch testing method of claim 20, wherein the DUTs receive the first testing signal in a predetermined channel.

26. The batch testing method of claim 25, wherein the analyzing step comprises:

25 analyzing minimum input power and packet error rate (PER) of each of the DUTs in the predetermined channel.

27. The batch testing method of claim 20, wherein the received second testing signals are monitored by a Golden Sample of the DUTs.

28. The batch testing method of claim 20, wherein the received second

testing signals are monitored by a vector signal analyzer and a power meter.

29. The batch testing method of claim 20, wherein the second testing signals are transmitted in order in a predetermined channel by each of the DUTs.

5 30. The batch testing method of claim 29, wherein the monitoring step comprises:

analyzing maximum output power and error vector magnitude (EVM) of each of the DUTs in the predetermined channel.

10 31. The batch testing method of claim 20, wherein the received second testing signals are monitored by a spectrum analyzer.

32. The batch testing method of claim 20, wherein the step of transmitting the second testing signals comprises:

selecting one or more of the DUTs for transmitting the second testing signals in one or more predetermined non-overlapping channels.

15 33. The batch testing method of claim 32, wherein the monitoring step comprises:

analyzing center frequency and power mask of each of the selected DUTs in a corresponding one of the predetermined channels.

20 34. The batch testing method of claim 20, wherein the first testing signal is received in a predetermined channel by each of the DUTs in order.

35. The batch testing method of claim 34, wherein the analyzing step comprises:

analyzing downlink throughput of each of the DUTs in the predetermined channel.

25 36. The batch testing method of claim 29, wherein the monitoring step comprises:

analyzing uplink throughput of each of the DUTs in the predetermined channel.

37. A batch testing method for wireless communication devices comprising:

setting a plurality of wireless communication devices under test (DUTs)
in a shielded anechoic chamber;

selecting a transmitting group and a receiving group of DUTs from the
plurality of DUTs;

5 transmitting a testing signal by the transmitting group of DUTs;
receiving the testing signal by the receiving group of DUTs; and
analyzing the testing signal received by the receiving group of DUTs.

10 38. The batch testing method of claim 37, wherein the testing signal is
transmitted in predetermined non-overlapping channels simultaneously
by each DUT of the transmitting group.

39. The batch testing method of claim 38, wherein the testing signal is
received in the non-overlapping channels simultaneously by each DUT
of the receiving group.

15 40. The batch testing method of claim 39, wherein the analyzing step
comprises:

analyzing downlink throughput of the receiving group of DUTs; and
analyzing uplink throughput of the transmitting group of DUTs.